



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/813,078

03/31/2004

Patrick Hallinan

066949-0001

4644

7590 11/09/2009  
Dykema Gossett, PLLC  
Suite 300 West  
1300 I Street, N.W.  
Washington, DC 20005-3306

EXAMINER

TORRES, ALICIA M

ART UNIT

PAPER NUMBER

3671

MAIL DATE

DELIVERY MODE

11/09/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/813,078	<b>Applicant(s)</b> HALLINAN ET AL.	
	<b>Examiner</b> ALICIA M. TORRES	<b>Art Unit</b> 3671	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 06 July 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-3,5,7,10,16,18-20,22-27 and 31-37 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3,5,7,10,16,18-20,22-27 and 31-37 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

**DETAILED ACTION**

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 2, 7, 10, 20, 22-24, 27, 31-33, 36 and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fridley et al. 4,326,570 in view of Gates 5,065,566.

Fridley et al. disclose a trimming system for a user-operated ground vehicle capable of performing mowing and trimming operations, said system comprising:

drive means (22) operatively coupled to a drive system (via 23) of the vehicle (1) having said trimming system (16, 27) mounted thereon;

a trimming unit (27) operatively coupled to said drive means (22) for performing edge trimming operations, and

a guide wheel (15) mounted to a vehicle frame (1) adjacent said trimming unit (27) for maintaining said trimming unit at a predetermined lateral distance from a stationary object (30) during performance of said edge trimming operations, said guide wheel (15) being mounted on a resiliently biased bracket (6) dimensioned to materially deflect, said bracket (6) being fixedly mounted (at 7) to the vehicle frame (1) and resiliently biased by a spring (8) mounted between the vehicle frame (1) and said bracket (6) for allowing material and spring biased deflection (see column 5, lines 34-50) of said bracket (6) by a predetermined distance under the bias of said

Art Unit: 3671

spring relative to said trimming unit (27) and the vehicle frame (1) upon contact of said guide wheel (15) with the stationary object (15);

wherein the drive means (22) comprise at least one driven pulley (26) operatively coupled to a drive pulley (25) of the vehicle (1) for driving the trimming unit (27);

wherein said bracket (6) permits the predetermined deflection of said guide wheel (15) to thus enable a user to operate the vehicle (1) at full speed away from and in the vicinity of stationary objects (30) without requiring reduction of the speed in the vicinity of stationary objects.

However, Fridley et al. fail to disclose wherein the trimming unit including a spindle having at least one trimming wire for enabling performance of the edge trimming operations during rotation of the spindle;

wherein said trimming unit being coupled to the vehicle by a threaded shaft to enable height adjustment of said trimming unit by rotation of said trimming unit relative to said shaft.

Gates discloses a similar trimming system wherein the trimming unit including a spindle (90) having at least one trimming wire (70, 72) enabling performance of the edge trimming operations during rotation of the spindle (90);

wherein said trimming unit (shown in Figure 5) being coupled to the vehicle (at 10) by a threaded shaft (92) to enable height adjustment of said trimming unit by rotation of said trimming unit relative to said shaft (92).

Art Unit: 3671

It would have been obvious to one having ordinary skill in the art at the time the invention was made to include the height adjustment device of Gates on the trimming system of Fridley et al. in order to achieve the predictable result of enabling a cutting height adjustment.

3. Claims 5, 26, 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fridley et al. and Gates as applied to claim 1 above, and further in view of Gustafson et al. 6,722,284.

The device is disclosed as applied to claim 1 above. However, while Fridley et al. disclose a guide wheel, the combination fails to specifically disclose wherein the guide wheel is made of nylon.

Gustafson et al. discloses a guide wheel for a steerable robot. Gustafson et al. teaches that nylon guide rollers (301-304) are ideal because friction is reduced and wear between the guide wheels and objects is reduced (column 4, lines 45-52).

In light of the teaching of Gustafson et al., it would have been obvious to one having ordinary skill in the art at the time the invention was made to include nylon guides on Fridley et al. and Gates' trimming system in order to reduce wear and friction.

4. Claims 3, 16, 18, 19, 25 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fridley et al. in view of Bird 5,167,108, as cited by the applicant.

Fridley et al. disclose a mowing and trimming system comprising:

a drive unit (22) including at least one drive (25) and driven pulley (26), and a guide wheel (15) mounted on a driven axle (13) of said trimming unit (27) for maintaining said trimming unit (27) at a predetermined distance from a stationary object (30) during performance

Art Unit: 3671

of said edge trimming operations, wherein said guide wheel (30) being mounted on a vehicle (1) having said mowing and trimming system mounted thereon.

However, Fridley et al. fail to disclose wherein said drive pulley being operatively coupled to said driven pulley to at least one of selectively and simultaneously drive a mowing unit for performing mowing operations and a trimming unit for performing edge trimming operations;

said guide wheel being mounted by a threaded shaft to enable height adjustment of said guide wheel by rotation of said guide wheel relative to said shaft.

Bird discloses a similar trimming system wherein the drive pulley (34) being operatively coupled to said driven pulley (36) to at least one of selectively (by actuation of lever 20) and simultaneously drive a mowing unit (12) for performing mowing operations and a trimming unit (15) for performing edge trimming operations.

Gates discloses a threaded shaft (92) to enable height adjustment of the guide device (110) and trimming unit (see Figure 5) by rotation of the shoe (118) relative to the shaft (92).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to include the drive means of Bird on the trimmer system of Fridley et al. in order to transfer drive from the mower device to the trimmer device.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to include the height adjustment device of Gates on the trimming system of Fridley et al. in order to achieve the predictable result of enabling a cutting height adjustment.

***Response to Arguments***

5. Applicant argues that Fridley's bracket is not fixedly mounted to the vehicle frame and additionally applicant argues that Fridley fails to disclose a resiliently biased bracket dimensioned to allow for material and spring biased deflection of the bracket.

First, it is unclear how Fridley's bracket which is pivotably mounted to the vehicle frame is mounted any differently than that of the invention since the bracket of the invention is also mounted for pivotal movement relative to the vehicle frame. It appears that Fridley's bracket is fixedly mounted to the vehicle frame like that of the invention as it is permanently connected at a single point to the vehicle frame. Applicant fails to provide any structural limitations precluding Fridley's bracket.

Second, regarding the material and spring biased deflection of the bracket, Fridley's bracket swings relative to the vehicle frame in a materially and spring biased manner, as discussed in column 5, lines 34-50, Fridley's cylinder 8 acts as a spring. Again, the applicant has failed to provide any structural details precluding the Fridley reference. Applicant has merely claimed a vague function (deflection of the bracket in a materially and spring biased manner) without providing any details to the structure which would allow for this function.

Applicant argues that Gates does not disclose a shoe that provides lateral guidance nor does Gates's shoe modifiable to extend beyond the trimming circumference. However, these details are already disclosed by Fridley. The Gates reference is used simply to show that a height adjustable trimmer via a threaded shaft is known in the art.

Art Unit: 3671

***Conclusion***

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alicia M. Torres whose telephone number is 571-272-6997. The examiner can normally be reached Monday through Friday from 7:00 a.m. – 4:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas B. Will, can be reached at 571-272-6998.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the group receptionist whose telephone number is 571-272-3600. The fax number for this Group is 571-273-8300.

/Alicia M Torres/  
Primary Examiner, Art Unit 3671  
November 5, 2009